In the Claims:

Please amend applicant's claims, without prejudice, to read as follows:

Claims

1 (currently amended). A flow control device, comprising:

(a) a cap member configured and dimensioned for cooperation with a fluid container, said cap member including a plurality of circumferentially spaced ratchet teeth defined on an inner surface thereof;

(b) an overcap movably mounted with respect to said cap member, said overcap defining a central opening and including at least one tooth defined on an inner surface thereof, said at least one tooth being positioned so as to engage said ratchet teeth as said overcap is mounted relative to said cap member; and

(c) a ball positioned within said overcap, said ball being sized to obstruct fluid passage through said central opening;

wherein a variable flow clearance may be established by movement of said overcap relative to said cap member; and

wherein said ratchet teeth extend for substantially the entire circumference of said inner surface of said cap member, and wherein a clearance gap is defined between an adjacent pair of ratchet teeth.

2 (canceled).

3 (canceled).

4 (currently amended). A flow control device according to claim 1, ~~3,~~ further comprising a stop tooth positioned between an adjacent pair of ratchet teeth.

5 (canceled).

6 (currently amended). A flow control device according to claim 1, ~~5,~~ wherein said clearance gap extends for an angular distance of about 10°.

7 (original). A flow control device according to claim 1, wherein at least one thread is defined on said inner surface of said cap member.

8 (original). A flow control device according to claim 7, wherein double threads are defined on said inner surface of said cap member.

9 (original). A flow control device according to claim 7, wherein said at least one thread is spaced from said ratchet teeth.

10 (original). A flow control device according to claim 7, further comprising an indicator on an exterior surface of said overcap that is substantially aligned with a reference marker defined on an exterior surface of said cap member when said overcap is brought into engagement with said cap member.

11 (original). A flow control device according to claim 1, further comprising a sealing member positioned between said overcap and said cap member.

12 (original). A flow control device according to claim 11, wherein said sealing member is selected from the group consisting of a washer, an O-ring and a gasket.

13 (original). A flow control device according to claim 11, wherein said sealing member includes a raised surface defined on said cap member, said raised surface cooperating with said overcap to enhance sealing therebetween.

14 (original). A flow control device according to claim 1, wherein at least one said plurality of ratchet teeth includes a tapered geometry.

15 (original). A flow control device according to claim 14, wherein each of said plurality of ratchet teeth includes a tapered geometry.

16 (original). A flow control device according to claim 14, wherein each of said plurality of ratchet teeth defines a top end and a bottom end, and wherein said tapered geometry includes an outward taper from said top end to said bottom end.

17 (original). A flow control device according to claim 1, further comprising a plurality of ridges defined on external surfaces of said overcap and cap member, and wherein said plurality of ridges define a substantially triangular cross-section.

18 (original). A flow control device according to claim 1, wherein said movement is effected, at least in part, by rotational motion of said overcap relative to said cap member.

19 (original). A flow control device according to claim 1, wherein said movement is effected, at least in part, by axial motion of said overcap relative to said cap member.

20 (canceled).

21 (canceled).

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67 (canceled).

68 (canceled).

69 (canceled).

70 (canceled).

71 (new). A flow control device, comprising:

(a) a cap member configured and dimensioned for cooperation with a fluid container, said cap member including a plurality of circumferentially spaced ratchet teeth defined on an inner surface thereof;

(b) an overcap movably mounted with respect to said cap member, said overcap defining a central opening and including at least one tooth defined on an inner surface thereof, said at least one tooth being positioned so as to engage said ratchet teeth as said overcap is mounted relative to said cap member; and

(c) a ball positioned within said overcap, said ball being sized to obstruct fluid passage through said central opening;

wherein a variable flow clearance may be established by movement of said overcap relative to said cap member;

wherein at least one thread is defined on said inner surface of said cap member; and

wherein said at least one thread is spaced from said ratchet teeth.

72 (new). A flow control device according to claim 71, further comprising a stop tooth positioned between an adjacent pair of ratchet teeth.

73 (new). A flow control device according to claim 71, wherein said ratchet teeth extend for substantially the entire circumference of said inner surface of said cap member, and wherein a clearance gap is defined between an adjacent pair of ratchet teeth.

74 (new). A flow control device according to claim 73, wherein said clearance gap extends for an angular distance of about 10°.

75 (new). A flow control device according to claim 71, wherein double threads are defined on said inner surface of said cap member.

76 (new). A flow control device according to claim 71, further comprising an indicator on an exterior surface of said overcap that is substantially aligned with a reference marker defined on an exterior surface of said cap member when said overcap is brought into engagement with said cap member.

77 (new). A flow control device according to claim 71, further comprising a sealing member positioned between said overcap and said cap member.

78 (new). A flow control device according to claim 77, wherein said sealing member is selected from the group consisting of a washer, an O-ring and a gasket.

79 (new). A flow control device according to claim 77, wherein said sealing member includes a raised surface defined on said cap member, said raised surface cooperating with said overcap to enhance sealing therebetween.

80 (new). A flow control device according to claim 71, wherein at least one said plurality of ratchet teeth includes a tapered geometry.

81 (new). A flow control device according to claim 80, wherein each of said plurality of ratchet teeth includes a tapered geometry.

82 (new). A flow control device according to claim 81, wherein each of said plurality of ratchet teeth defines a top end and a bottom end, and wherein said tapered geometry includes an outward taper from said top end to said bottom end.

83 (new). A flow control device according to claim 71, further comprising a plurality of ridges defined on external surfaces of said overcap and cap member, and wherein said plurality of ridges define a substantially triangular cross-section.

84 (new). A flow control device according to claim 71, wherein said movement is effected, at least in part, by rotational motion of said overcap relative to said cap member.

85 (new). A flow control device according to claim 71, wherein said movement is effected, at least in part, by axial motion of said overcap relative to said cap member.

86 (new). A flow control device, comprising:

(a) a cap member configured and dimensioned for cooperation with a fluid container, said cap member including a plurality of circumferentially spaced ratchet teeth defined on an inner surface thereof;

(b) an overcap movably mounted with respect to said cap member, said overcap defining a central opening and including at least one tooth defined on an inner

surface thereof, said at least one tooth being positioned so as to engage said ratchet teeth as said overcap is mounted relative to said cap member; and

(c) a ball positioned within said overcap, said ball being sized to obstruct fluid passage through said central opening;

wherein a variable flow clearance may be established by movement of said overcap relative to said cap member;

wherein at least one thread is defined on said inner surface of said cap member; and

further comprising an indicator on an exterior surface of said overcap that is substantially aligned with a reference marker defined on an exterior surface of said cap member when said overcap is brought into engagement with said cap member.

87 (new). A flow control device according to claim 86, further comprising a stop tooth positioned between an adjacent pair of ratchet teeth.

88 (new). A flow control device according to claim 86, wherein said ratchet teeth extend for substantially the entire circumference of said inner surface of said cap member, and wherein a clearance gap is defined between an adjacent pair of ratchet teeth.

89 (new). A flow control device according to claim 88, wherein said clearance gap extends for an angular distance of about 10°.

90 (new). A flow control device according to claim 86, wherein double threads are defined on said inner surface of said cap member.

91 (new). A flow control device according to claim 86, wherein said at least one thread is spaced from said ratchet teeth.

92 (new). A flow control device according to claim 86, further comprising a sealing member positioned between said overcap and said cap member.

93 (new). A flow control device according to claim 92, wherein said sealing member is selected from the group consisting of a washer, an O-ring and a gasket.

94 (new). A flow control device according to claim 92, wherein said sealing member includes a raised surface defined on said cap member, said raised surface cooperating with said overcap to enhance sealing therebetween.

95 (new). A flow control device according to claim 86, wherein at least one said plurality of ratchet teeth includes a tapered geometry.

96 (new). A flow control device according to claim 95, wherein each of said plurality of ratchet teeth includes a tapered geometry.

97 (new). A flow control device according to claim 95, wherein each of said plurality of ratchet teeth defines a top end and a bottom end, and wherein said tapered geometry includes an outward taper from said top end to said bottom end.

98 (new). A flow control device according to claim 86, further comprising a plurality of ridges defined on external surfaces of said overcap and cap member, and wherein said plurality of ridges define a substantially triangular cross-section.

99 (new). A flow control device according to claim 86, wherein said movement is effected, at least in part, by rotational motion of said overcap relative to said cap member.

100 (new). A flow control device according to claim 86, wherein said movement is effected, at least in part, by axial motion of said overcap relative to said cap member.

101 (new). A flow control device, comprising:

(a) a cap member configured and dimensioned for cooperation with a fluid container, said cap member including a plurality of circumferentially spaced ratchet teeth defined on an inner surface thereof;

(b) an overcap movably mounted with respect to said cap member, said overcap defining a central opening and including at least one tooth defined on an inner surface thereof, said at least one tooth being positioned so as to engage said ratchet teeth as said overcap is mounted relative to said cap member;

(c) a ball positioned within said overcap, said ball being sized to obstruct fluid passage through said central opening; and

(d) a sealing member positioned between said overcap and said cap member;

wherein a variable flow clearance may be established by movement of said overcap relative to said cap member.

102 (new). A flow control device according to claim 101, further comprising a stop tooth positioned between an adjacent pair of ratchet teeth.

103 (new). A flow control device according to claim 101, wherein said ratchet teeth extend for substantially the entire circumference of said inner surface of said cap member, and wherein a clearance gap is defined between an adjacent pair of ratchet teeth.

104 (new). A flow control device according to claim 103, wherein said clearance gap extends for an angular distance of about 10°.

105 (new). A flow control device according to claim 101, wherein at least one thread is defined on said inner surface of said cap member.

106 (new). A flow control device according to claim 105, wherein double threads are defined on said inner surface of said cap member.

107 (new). A flow control device according to claim 105, wherein said at least one thread is spaced from said ratchet teeth.

108 (new). A flow control device according to claim 105, further comprising an indicator on an exterior surface of said overcap that is substantially aligned with a

reference marker defined on an exterior surface of said cap member when said overcap is brought into engagement with said cap member.

109 (new). A flow control device according to claim 101, wherein said sealing member is selected from the group consisting of a washer, an O-ring and a gasket.

110 (new). A flow control device according to claim 101, wherein said sealing member includes a raised surface defined on said cap member, said raised surface cooperating with said overcap to enhance sealing therebetween.

111 (new). A flow control device according to claim 101, wherein at least one said plurality of ratchet teeth includes a tapered geometry.

112 (new). A flow control device according to claim 111, wherein each of said plurality of ratchet teeth includes a tapered geometry.

113 (new). A flow control device according to claim 111, wherein each of said plurality of ratchet teeth defines a top end and a bottom end, and wherein said tapered geometry includes an outward taper from said top end to said bottom end.

114 (new). A flow control device according to claim 101, further comprising a plurality of ridges defined on external surfaces of said overcap and cap member, and wherein said plurality of ridges define a substantially triangular cross-section.

115 (new). A flow control device according to claim 101, wherein said movement is effected, at least in part, by rotational motion of said overcap relative to said cap member.

116 (new). A flow control device according to claim 101, wherein said movement is effected, at least in part, by axial motion of said overcap relative to said cap member.

117 (new). A flow control device, comprising:

(a) a cap member configured and dimensioned for cooperation with a fluid container, said cap member including a plurality of circumferentially spaced ratchet teeth defined on an inner surface thereof;

(b) an overcap movably mounted with respect to said cap member, said overcap defining a central opening and including at least one tooth defined on an inner surface thereof, said at least one tooth being positioned so as to engage said ratchet teeth as said overcap is mounted relative to said cap member;

(c) a ball positioned within said overcap, said ball being sized to obstruct fluid passage through said central opening; and

(d) a plurality of ridges defined on external surfaces of said overcap and cap member, and wherein said plurality of ridges define a substantially triangular cross-section

wherein a variable flow clearance may be established by movement of said overcap relative to said cap member.

118 (new). A flow control device according to claim 117, further comprising a stop tooth positioned between an adjacent pair of ratchet teeth.

119 (new). A flow control device according to claim 117, wherein said ratchet teeth extend for substantially the entire circumference of said inner surface of said cap member, and wherein a clearance gap is defined between an adjacent pair of ratchet teeth.

120 (new). A flow control device according to claim 119, wherein said clearance gap extends for an angular distance of about 10°.

121 (new). A flow control device according to claim 117, wherein at least one thread is defined on said inner surface of said cap member.

122 (new). A flow control device according to claim 121, wherein double threads are defined on said inner surface of said cap member.

123 (new). A flow control device according to claim 121, wherein said at least one thread is spaced from said ratchet teeth.

124 (new). A flow control device according to claim 121, further comprising an indicator on an exterior surface of said overcap that is substantially aligned with a reference marker defined on an exterior surface of said cap member when said overcap is brought into engagement with said cap member.

125 (new). A flow control device according to claim 117, further comprising a sealing member positioned between said overcap and said cap member.

126 (new). A flow control device according to claim 125, wherein said sealing member is selected from the group consisting of a washer, an O-ring and a gasket.

127 (new). A flow control device according to claim 125, wherein said sealing member includes a raised surface defined on said cap member, said raised surface cooperating with said overcap to enhance sealing therebetween.

128 (new). A flow control device according to claim 117, wherein at least one said plurality of ratchet teeth includes a tapered geometry.

129 (new). A flow control device according to claim 128, wherein each of said plurality of ratchet teeth includes a tapered geometry.

130 (new). A flow control device according to claim 128, wherein each of said plurality of ratchet teeth defines a top end and a bottom end, and wherein said tapered geometry includes an outward taper from said top end to said bottom end.

131 (new). A flow control device according to claim 117, further comprising.

132 (new). A flow control device according to claim 117, wherein said movement is effected, at least in part, by rotational motion of said overcap relative to said cap member.

133 (new). A flow control device according to claim 1, wherein said movement is effected, at least in part, by axial motion of said overcap relative to said cap member.

134 (new). A flow control device, comprising:

(a) a cap member configured and dimensioned for cooperation with a fluid container, said cap member including a plurality of circumferentially spaced ratchet teeth defined on an inner surface thereof;

(b) an overcap movably mounted with respect to said cap member, said overcap defining a central opening and including at least one tooth defined on an inner surface thereof, said at least one tooth being positioned so as to engage said ratchet teeth as said overcap is mounted relative to said cap member; and

(c) a ball positioned within said overcap, said ball being sized to obstruct fluid passage through said central opening;

wherein a variable flow clearance may be established by movement of said overcap relative to said cap member; and

wherein said movement is effected, at least in part, by axial motion of said overcap relative to said cap member.

135 (new). A flow control device according to claim 134, further comprising a stop tooth positioned between an adjacent pair of ratchet teeth.

136 (new). A flow control device according to claim 134, wherein said ratchet teeth extend for substantially the entire circumference of said inner surface of said cap member, and wherein a clearance gap is defined between an adjacent pair of ratchet teeth.

137 (new). A flow control device according to claim 136, wherein said clearance gap extends for an angular distance of about 10°.

138 (new). A flow control device according to claim 134, wherein at least one thread is defined on said inner surface of said cap member.

139 (new). A flow control device according to claim 138, wherein double threads are defined on said inner surface of said cap member.

140 (new). A flow control device according to claim 138, wherein said at least one thread is spaced from said ratchet teeth.

141 (new). A flow control device according to claim 138, further comprising an indicator on an exterior surface of said overcap that is substantially aligned with a reference marker defined on an exterior surface of said cap member when said overcap is brought into engagement with said cap member.

142 (new). A flow control device according to claim 134, further comprising a sealing member positioned between said overcap and said cap member.

143 (new). A flow control device according to claim 142, wherein said sealing member is selected from the group consisting of a washer, an O-ring and a gasket.

144 (new). A flow control device according to claim 142, wherein said sealing member includes a raised surface defined on said cap member, said raised surface cooperating with said overcap to enhance sealing therebetween.

145 (new). A flow control device according to claim 134, wherein at least one said plurality of ratchet teeth includes a tapered geometry.

146 (new). A flow control device according to claim 145, wherein each of said plurality of ratchet teeth includes a tapered geometry.

147 (new). A flow control device according to claim 145, wherein each of said plurality of ratchet teeth defines a top end and a bottom end, and wherein said tapered geometry includes an outward taper from said top end to said bottom end.

148 (new). A flow control device according to claim 134, further comprising a plurality of ridges defined on external surfaces of said overcap and cap member, and wherein said plurality of ridges define a substantially triangular cross-section.

149 (new). A flow control device according to claim 134, wherein said movement is effected, at least in part, by rotational motion of said overcap relative to said cap member.